

1 1. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing call control using data commands provided over a data line,
5 the method comprising the following:

6 a specific act of receiving a call control command from a data line;

7 a specific act of interpreting the call control command;

8 a specific act of determining one or more acts that would need to be accomplished
9 to comply with the call control command; and

10 a specific act of implementing the one or more acts on one or more voice lines or
11 one or more data lines.

12
13 2. A method in accordance with Claim 1, further comprising the following:

14 a specific act of scheduling the one or more acts.

15
16 3. A method in accordance with Claim 2, wherein the specific act of
17 scheduling the one or more acts comprises the following:

18 a specific act of placing one or more higher priority acts of the one or more acts in a
19 queue for expedited execution; and

20 a specific act of placing one or more lower priority acts of the one or more acts in a
21 database for delayed execution.

22
23 4. A method in accordance with Claim 3, further comprising the following:

24 a specific act of executing the one or more higher priority acts; and

1 a specific act of executing the acts in the database after the queue has been emptied.

2
3 5. A method in accordance with Claim 1, wherein the call control command is
4 a first call control command, wherein the one or more acts are a first set of one or more
5 acts, the method further comprising the following:

6 a specific act of receiving a second call control command from a voice line;

7 a specific act of interpreting the second call control command;

8 a specific act of determining a second group of one or more acts that would need to
9 be accomplished to comply with the second call control command; and

10 a specific act of implementing the second group of one or more acts.

11
12 6. A method in accordance with Claim 1, wherein the specific act of receiving
13 the call control command from a data line comprises the following:

14 receiving the call control command from the data line via a Telephony Application
15 Program Interface.

1 7. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing call control using data commands provided over a data line,
5 the method comprising the following:

6 a specific act of receiving a call control command from a data line; and

7 a step for processing so as to fulfill the call control command on one or more voice
8 lines or one or more data lines.

9
10 8. A method in accordance with Claim 7, wherein the step for processing so as
11 to fulfill the call control command comprises the following:

12 a specific act of interpreting the call control command;

13 a specific act of determining one or more acts that would need to be accomplished
14 to comply with the call control command; and

15 a specific act of implementing the one or more acts on one or more voice lines.
16

1 9. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing call
5 control using data commands provided over a data line, the computer program product
6 comprising one or more computer-readable media having stored thereon the following:

7 computer-executable instructions for detecting the receipt of a call control
8 command from a data line;

9 computer-executable instructions for interpreting the call control command;

10 computer-executable instructions for determining one or more acts that would need
11 to be accomplished to comply with the call control command; and

12 computer-executable instructions for implementing the one or more acts on one or
13 more voice lines or one or more data lines.

14
15 10. A computer program product in accordance with Claim 9, wherein the
16 computer-readable medium is one or more physical storage media.
17

1 11. A call control server configured to recognize and respond to commands
2 issued by the telephonic device to thereby accomplish telephonic tasks, the call control
3 server comprising the following:

4 one or more data lines;

5 one or more voice lines; and

6 means for processing a call control command received on one of the data lines so as
7 to implement the call control command on one or more voice lines or one or more data
8 lines.

9
10 12. A call control server in accordance with Claim 11, further comprising the
11 following:

12 a queue for storing higher priority acts received from the command interpreter for
13 more immediate execution; and

14 a database for storing lower priority acts received from the command interpreter for
15 less immediate execution.

1 13. A call control server configured to recognize and respond to commands
2 issued by the telephonic device to thereby accomplish telephonic tasks, the call control
3 server comprising the following:

4 one or more data lines;

5 one or more voice lines;

6 a command interpreter configured to interpret call control commands received over
7 at least the data lines; and

8 an action scheduler configured to implement one or more acts needed to implement
9 the call control commands on the voice lines or the data lines.

10
11 14. A call control server in accordance with Claim 13, wherein the command
12 interpreter is configured to prioritize the one or more acts.

13
14 15. A call control server in accordance with Claim 14, further comprising the
15 following:

16 a queue for storing higher priority acts received from the command interpreter for
17 more immediate execution.

18
19 16. A call control server in accordance with Claim 14, further comprising the
20 following:

21 a database for storing lower priority acts received from the command interpreter for
22 less immediate execution.

1 17. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing a human to use a set of commands that are more intuitive to
5 the human in order to control the call control server, even though the call control server
6 does not directly recognize the intuitive set of commands, the method comprising the
7 following:

8 a specific act of receiving a function call issued by a set of one or more program
9 modules, wherein the function call represents a request for the call control server to
10 emulate a telephonic scenario, the request being in a form that is not recognized by the call
11 control server; and

12 a specific act of translating the request into a form that is recognized by the call
13 control server.

14
15 18. A method in accordance with Claim 17, wherein the method is implemented
16 on the same machine as the call control server, the method further comprising the
17 following:

18 a specific act of passing the translated request to the call control server.

19
20 19. A method in accordance with Claim 17, wherein the method is implemented
21 on a different machine as the call control server, the method further comprising the
22 following:

23 a specific act of transmitting the translated request to the call control server.

1 20. A method in accordance with Claim 17, wherein the specific act of
2 translating the request into a form that is recognized by the call control server comprises
3 the following:

4 a specific act of translating the request into a sequence represented by the
5 characters of a telephonic keypad including the characters 0 through 9, # and *.

6
7 21. A method in accordance with Claim 17, wherein the specific act of
8 translating the request into a form that is recognized by the call control server comprises
9 the following:

10 a specific act of translating the request into a DTMF sequence.

11
12 22. A method in accordance with Claim 17, wherein the function call includes a
13 handle that identified a connection with the call control server.

14
15 23. A method in accordance with Claim 17, wherein the function call comprises
16 a request to stay connected for a predetermined period of time.

17
18 24. A method in accordance with Claim 23, wherein the request to stay connect
19 for a predetermined period of time comprises the following:

20 a first field representing the time that the call control server should remain
21 connected before hanging up.

1 25. A method in accordance with Claim 24, wherein the request is generated
2 from source code that takes the form `BOOL CCCStayConnected(HCALL hcall,`
3 `CCCParam &cccParam).`

4
5 26. A method in accordance with Claim 17, wherein the function call comprises
6 a request to have the call control server call back.

7
8 27. A method in accordance with Claim 26, wherein the request to have the call
9 control server call back comprises the following:

10 a first field representing a telephone number to call back;

11 a second field representing an interval between call backs; and

12 a third field representing a period of time over which to call back.

13
14 28. A method in accordance with Claim 27, wherein the request is generated
15 from source code that takes the form `BOOL CCCOrderCallBack(HCALL hcall,`
16 `CCCParam &cccParam).`

17
18 29. A method in accordance with Claim 17, wherein the function call comprises
19 a request to echo data.

20
21 30. A method in accordance with Claim 29, wherein the request to echo data
22 comprises the following:

23 a first field representing the data to echo; and

24 a second field representing the number of times to echo.

1
2 31. A method in accordance with Claim 30, wherein the request is generated
3 from source code that takes the form `BOOL CCCEcho(HCALL hcall, CCCParam`
4 `&cccParam)`.

5
6 32. A method in accordance with Claim 17, wherein the function call comprises
7 a request to download a file.

8
9 33. A method in accordance with Claim 32, wherein the request to download a
10 file comprises the following:
11 a first field representing the name of the file to be downloaded.

12
13 34. A method in accordance with Claim 33, wherein the request takes the form
14 `BOOL CCCDownload(HCALL hcall, LPCTSTR & szFileName)`.

15
16 35. A method in accordance with Claim 17, wherein the function call comprises
17 a request to add a client telephonic device to a call list of the call control server.

18
19 36. A method in accordance with Claim 35, wherein the request to add a client
20 telephonic device to a call list of the call control server comprises the following:

21 a first field representing a telephone number of the client telephonic device;

22 a second field representing how long the call control server should keep the
23 telephone number; and

24 a third field representing actions that the client telephonic device is interested in.

1
2 37. A method in accordance with Claim 36, wherein the request takes the form
3 BOOL CCCAddClient(HCALL hcall, CCCParam &cccParam, ActionInterest actMask).

4
5 38. A method in accordance with Claim 17, wherein the function call is
6 generated by a user-entered data in a command line.

7
8 39. A method in accordance with Claim 38, wherein the function call is for a
9 teleconference to be initiated.

10
11 40. A method in accordance with Claim 39, wherein the user-entered data is of
12 the form CCSMakeConf followed by an identification of two lines that are to be involved
13 in the teleconference.

14
15 41. A method in accordance with Claim 38, wherein the function call is for the
16 call control server to call back.

17
18 42. A method in accordance with Claim 41, wherein the user-entered data is of
19 the form CCSCallBack followed by an identification of a telephone number to call back.
20

1 43. In a telephone network that includes a telephonic device that is network
2 connectable to a call control server, the call control server configured to recognize and
3 respond to commands issued by the telephonic device to thereby accomplish telephonic
4 tasks, a method for allowing a human to use a set of commands that are more intuitive to
5 the human in order to control the call control server, even though the call control server
6 does not directly recognize the intuitive set of commands, method comprising the
7 following:

8 a specific act of generating a function call that represents a request for the call
9 control server to emulate a telephonic scenario, the request being in a form that is not
10 recognized by the call control server; and

11 a specific act of passing the function call to a set of one or more program modules
12 for translation of the request into a form that is recognized by the call control server.

13
14 44. A method in accordance with Claim 43, wherein the function call includes a
15 handle that identified a connection with the call control server.

16
17 45. A method in accordance with Claim 43, wherein the function call comprises
18 a request to stay connected for a predetermined period of time.

19
20 46. A method in accordance with Claim 45, wherein the request to stay connect
21 for a predetermined period of time comprises the following:

22 a first field representing the time that the call control server should remain
23 connected before hanging up.

1 47. A method in accordance with Claim 46, wherein the request is generated
2 from source code that takes the form `BOOL CCCStayConnected(HCALL hcall,`
3 `CCCParam &cccParam).`

4
5 48. A method in accordance with Claim 43, wherein the function call comprises
6 a request to have the call control server call back.

7
8 49. A method in accordance with Claim 48, wherein the request to have the call
9 control server call back comprises the following:

10 a first field representing a telephone number to call back;

11 a second field representing an interval between call backs; and

12 a third field representing a period of time over which to call back.

13
14 50. A method in accordance with Claim 49, wherein the request is generated
15 from source code that takes the form `BOOL CCCOrderCallBack(HCALL hcall,`
16 `CCCParam &cccParam).`

17
18 51. A method in accordance with Claim 43, wherein the function call comprises
19 a request to echo data.

20
21 52. A method in accordance with Claim 51, wherein the request to echo data
22 comprises the following:

23 a first field representing the data to echo; and

24 a second field representing the number of times to echo.

1
2 53. A method in accordance with Claim 52, wherein the request is generated
3 from source code that takes the form `BOOL CCCEcho(HCALL hcall, CCCParam`
4 `&cccParam)`.

5
6 54. A method in accordance with Claim 43, wherein the function call comprises
7 a request to download a file.

8
9 55. A method in accordance with Claim 54, wherein the request to download a
10 file comprises the following:
11 a first field representing the name of the file to be downloaded.

12
13 56. A method in accordance with Claim 55, wherein the request takes the form
14 `BOOL CCCDownload(HCALL hcall, LPCTSTR & szFileName)`.

15
16 57. A method in accordance with Claim 43, wherein the function call comprises
17 a request to add a client telephonic device to a call list of the call control server.

18
19 58. A method in accordance with Claim 57, wherein the request to add a client
20 telephonic device to a call list of the call control server comprises the following:

21 a first field representing a telephone number of the client telephonic device;
22 a second field representing how long the call control server should keep the
23 telephone number; and
24 a third field representing actions that the client telephonic device is interested in.

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1
2 59. A method in accordance with Claim 58, wherein the request takes the form
3 BOOL CCCAddClient(HCALL hcall, CCCParam &cccParam, ActionInterest actMask).

1 60. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing a
5 human to use a set of commands that are more intuitive to the human in order to control
6 the call control server, even though the call control server does not directly recognize the
7 intuitive set of commands, the computer program product comprising one or more
8 computer-readable media having stored thereon the following:

9 computer-executable instructions for receiving a function call issued by a set of one
10 or more program modules, wherein the function call represents a request for the call
11 control server to emulate a telephonic scenario, the request being in a form that is not
12 recognized by the call control server; and

13 computer-executable instructions for translating the request into a form that is
14 recognized by the call control server.

15
16 61. A computer program product in accordance with Claim 60, wherein the
17 computer-readable medium is one or more physical storage media.

18
19 62. A computer program product in accordance with Claim 60, wherein the
20 computer-readable medium further has stored thereon the following:

21 computer-executable instructions for causing the translated request to be accessible
22 to the call control server.

1 63. A computer program product for use in a telephone network that includes a
2 telephonic device that is network connectable to a call control server, the call control
3 server configured to recognize and respond to commands issued by the telephonic device
4 to thereby accomplish telephonic tasks, the computer program product for allowing a
5 human to use a set of commands that are more intuitive to the human in order to control
6 the call control server, even though the call control server does not directly recognize the
7 intuitive set of commands, the computer program product comprising one or more
8 computer-readable media having stored thereon the following:

9 computer-executable instructions for generating a function call that represents a
10 request for the call control server to emulate a telephonic scenario, the request being in a
11 form that is not recognized by the call control server; and

12 computer-executable instructions for passing the function call to a set of one or
13 more program modules for translation of the request into a form that is recognized by the
14 call control server.

15
16 64. A computer program product in accordance with Claim 63, wherein the
17 computer-readable medium is one or more physical storage media.